

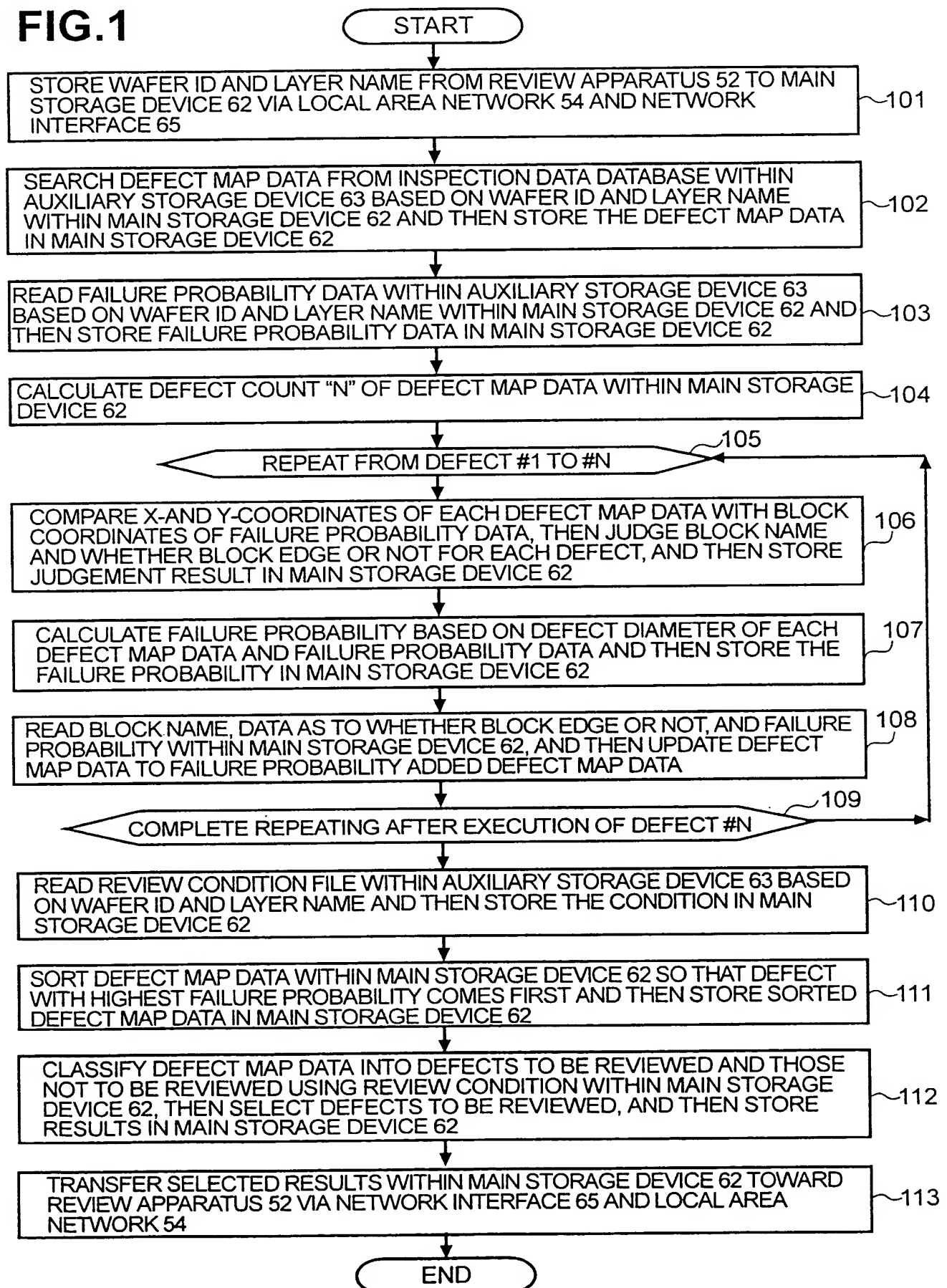
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FIG.1



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FIG. 2

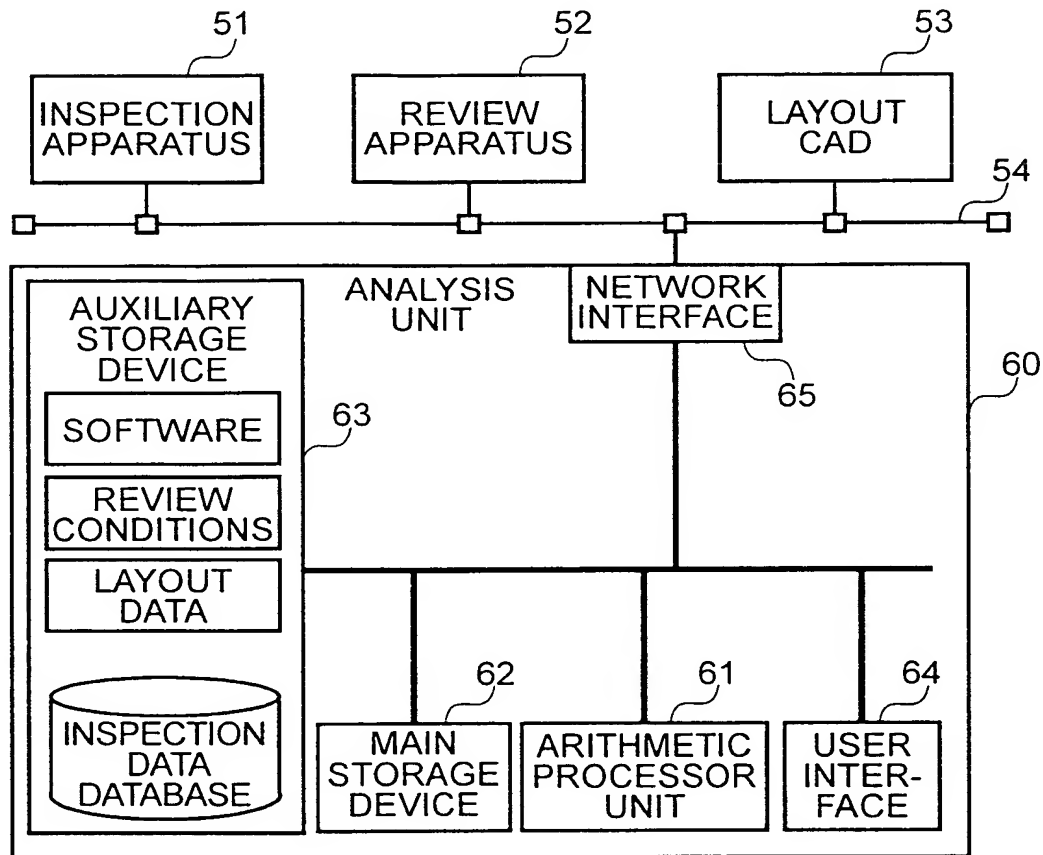


FIG. 3

| CHIP NO., | CHIP COLUMN, | CHIP ROW, | X,  | Y,  | DEFECT DIAMETER |
|-----------|--------------|-----------|-----|-----|-----------------|
| 1,        | 1,           | 1,        | 73, | 67, | 2.4             |
| 2,        | 5,           | 1,        | 25, | 89, | 0.3             |
| 3,        | 4,           | 2,        | 47, | 69, | 1.5             |
| 4,        | 5,           | 3,        | 80, | 82, | 1.0             |
| 5,        | 6,           | 5,        | 52, | 78, | 1.2             |
| 6,        | 3,           | 5,        | 71, | 32, | 0.2             |
| 7,        | 3,           | 7,        | 87, | 90, | 0.7             |
| 8,        | 2,           | 6,        | 77, | 38, | 0.3             |
| 9,        | 0,           | 4,        | 83, | 45, | 0.8             |
| 10,       | 2,           | 3,        | 49, | 9,  | 1.9             |

FIG.4

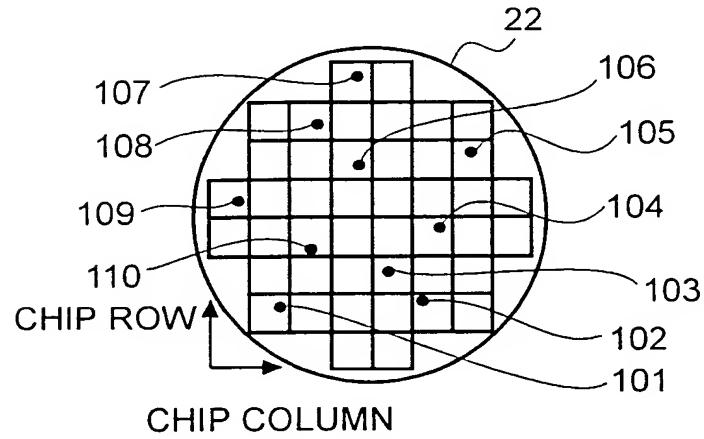
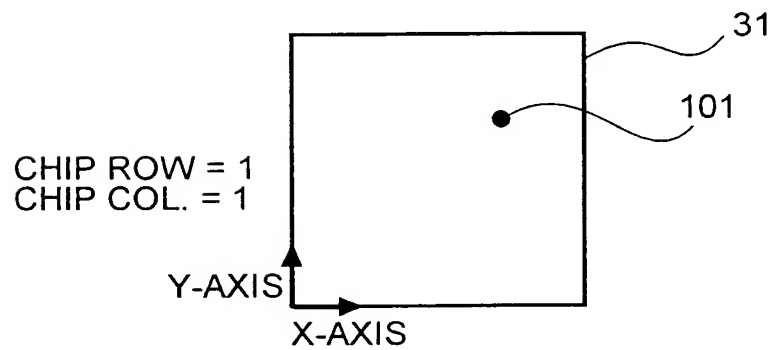


FIG.5



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FIG.6

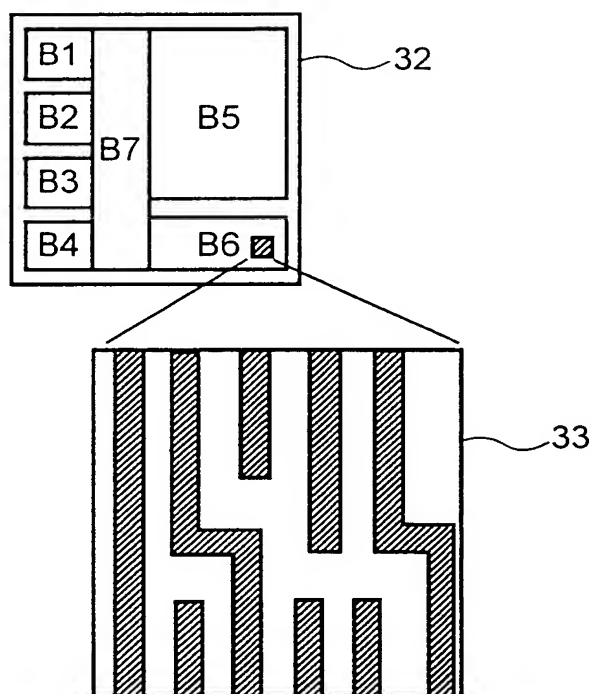


FIG. 6: SEMI-CONDUCTOR DEVICE

FIG.7

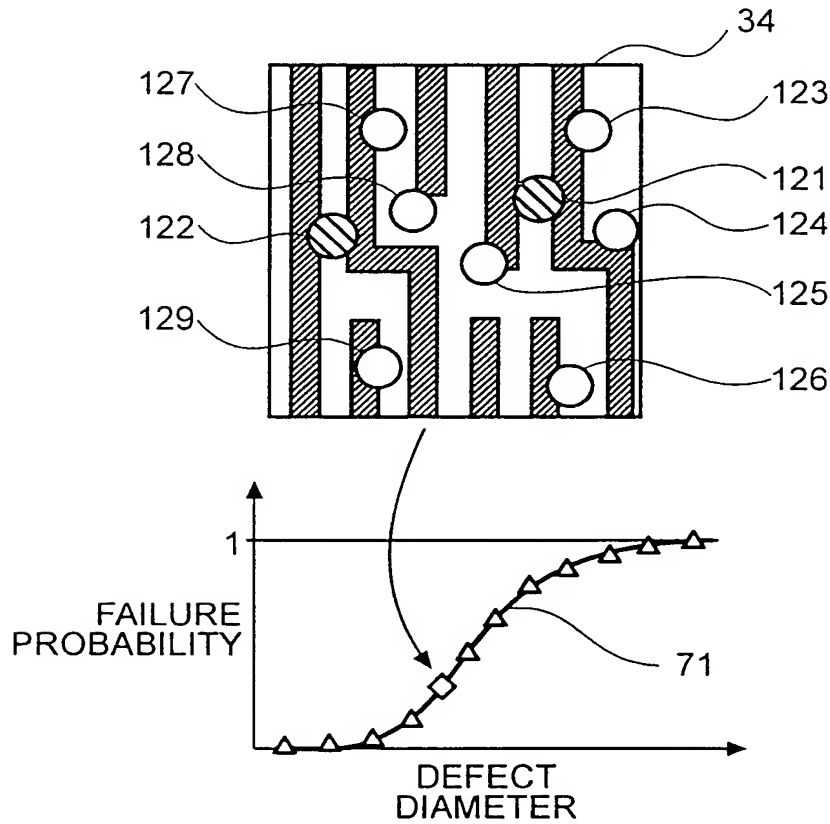


FIG.8

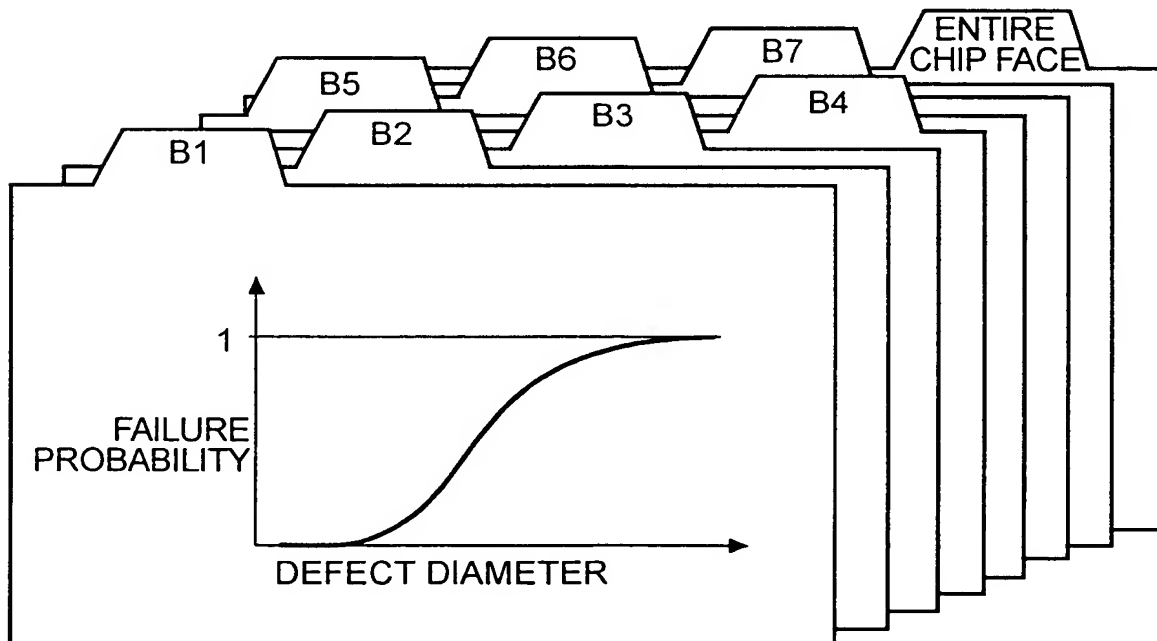
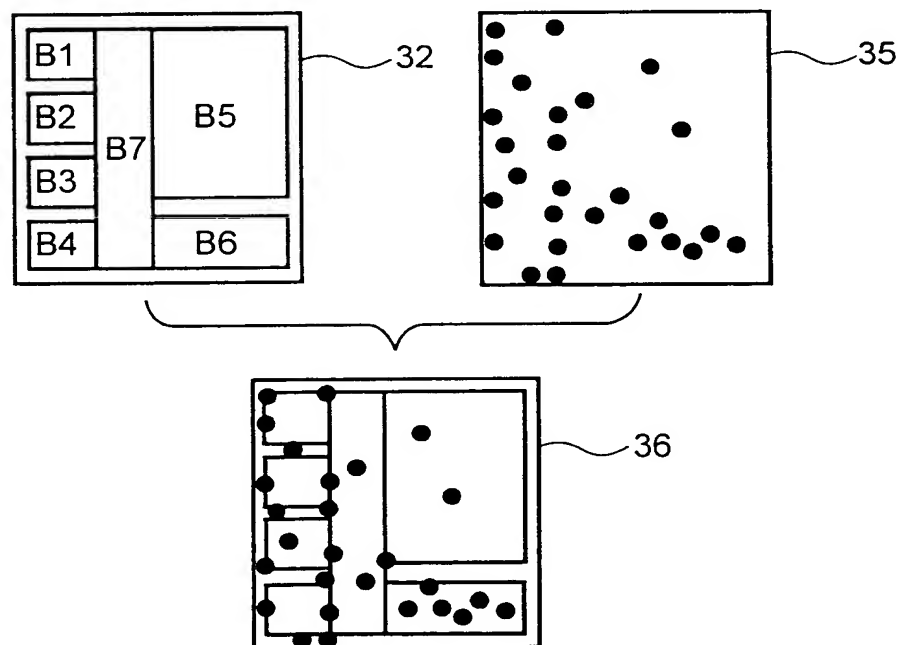


FIG. 9

| PRODUCT TYPE NAME        |             |
|--------------------------|-------------|
| LOGIC234                 |             |
| LAYER NAME               |             |
| METAL1                   |             |
| BLOCK NAME               |             |
| B1                       |             |
| BLOCK COORDINATES        |             |
| RECTANGLE DIAGONAL       |             |
| ANGLE (5, 80) - (20, 95) |             |
| DEFECT                   | FAILURE     |
| DIAMETER                 | PROBABILITY |
| 0.05,                    | 0.00        |
| 0.10,                    | 0.01        |
| 0.15,                    | 0.02        |
| 0.20,                    | 0.03        |
| 0.25,                    | 0.05        |
| .                        | .           |
| .                        | .           |
| 9.95,                    | 1.00        |
| 10.00,                   | 1.00        |

FIG. 10



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FIG.11

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| NO., | CHIP COL., | CHIP ROW, | X,  | Y,  | SIZE, | BLOCK, | BLOCK EDGE, | FAILURE PROBABILITY |
|------|------------|-----------|-----|-----|-------|--------|-------------|---------------------|
| 1,   | 1,         | 1,        | 73, | 67, | 2.4,  | B5,    | no,         | 0.83                |
| 2,   | 5,         | 1,        | 25, | 89, | 0.3,  | B1,    | no,         | 0.07                |
| 3,   | 4,         | 2,        | 47, | 69, | 1.5,  | B2,    | no,         | 0.26                |
| 4,   | 5,         | 3,        | 80, | 82, | 1.0,  | B5,    | no,         | 0.38                |
| 5,   | 6,         | 5,        | 52, | 78, | 1.2,  | B5,    | yes,        | 0.50                |
| 6,   | 3,         | 5,        | 71, | 32, | 0.2,  | B6,    | yes,        | 0.05                |
| 7,   | 3,         | 7,        | 87, | 90, | 0.7,  | B5,    | no,         | 0.35                |
| 8,   | 2,         | 6,        | 77, | 38, | 0.3,  | B6,    | no,         | 0.07                |
| 9,   | 0,         | 4,        | 83, | 45, | 0.8,  | B5,    | no,         | 0.28                |
| 10,  | 2,         | 3,        | 49, | 9,  | 1.9,  | B7,    | no,         | 0.06                |

FIG.12

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| NO., | CHIP COL., | CHIP ROW, | X,  | Y,  | SIZE, | BLOCK, | BLOCK EDGE, | FAILURE PROBABILITY |
|------|------------|-----------|-----|-----|-------|--------|-------------|---------------------|
| 1,   | 1,         | 1,        | 73, | 67, | 2.4,  | B5,    | no,         | 0.83                |
| 5,   | 6,         | 5,        | 52, | 78, | 1.2,  | B5,    | yes,        | 0.50                |
| 4,   | 5,         | 3,        | 80, | 82, | 1.0,  | B5,    | no,         | 0.38                |
| 7,   | 3,         | 7,        | 87, | 90, | 0.7,  | B5,    | no,         | 0.35                |
| 9,   | 0,         | 4,        | 83, | 45, | 0.8,  | B5,    | no,         | 0.28                |
| 3,   | 4,         | 2,        | 47, | 69, | 1.5,  | B2,    | no,         | 0.26                |
| 8,   | 2,         | 6,        | 77, | 38, | 0.3,  | B6,    | no,         | 0.07                |
| 2,   | 5,         | 1,        | 25, | 89, | 0.3,  | B1,    | no,         | 0.07                |
| 10,  | 2,         | 3,        | 49, | 9,  | 1.9,  | B7,    | no,         | 0.06                |
| 6,   | 3,         | 5,        | 71, | 32, | 0.2,  | B6,    | yes,        | 0.05                |

FIG. 11

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FIG.13

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| NO., | CHIP<br>COL., | CHIP<br>ROW, | X,  | Y,  | SIZE, | BLOCK, | BLOCK<br>EDGE, | FAILURE<br>PROBABILITY |
|------|---------------|--------------|-----|-----|-------|--------|----------------|------------------------|
| 1,   | 1,            | 1,           | 73, | 67, | 2.4,  | B5,    | no,            | 0.83                   |
| 4,   | 5,            | 3,           | 80, | 82, | 1.0,  | B5,    | no,            | 0.38                   |
| 7,   | 3,            | 7,           | 87, | 90, | 0.7,  | B5,    | no,            | 0.35                   |
| 9,   | 0,            | 4,           | 83, | 45, | 0.8,  | B5,    | no,            | 0.28                   |
| 3,   | 4,            | 2,           | 47, | 69, | 1.5,  | B2,    | no,            | 0.26                   |

FIG.14

27

| NO., | CHIP<br>COL., | CHIP<br>ROW, | X,  | Y,  | SIZE, | BLOCK, | BLOCK<br>EDGE, | FAILURE<br>PROBABILITY |
|------|---------------|--------------|-----|-----|-------|--------|----------------|------------------------|
| 3,   | 4,            | 2,           | 47, | 69, | 1.5,  | B2,    | no,            | 0.26                   |
| 8,   | 2,            | 6,           | 77, | 38, | 0.3,  | B6,    | no,            | 0.07                   |
| 2,   | 5,            | 1,           | 25, | 89, | 0.3,  | B1,    | no,            | 0.07                   |
| 10,  | 2,            | 3,           | 49, | 9,  | 1.9,  | B7,    | no,            | 0.06                   |
| 6,   | 3,            | 5,           | 71, | 32, | 0.2,  | B6,    | yes,           | 0.05                   |



FIG.15

25

| NO., | CHIP COL., | CHIP ROW, | X,  | Y,  | SIZE, | BLOCK, | BLOCK EDGE, | FAILURE PROBABILITY |
|------|------------|-----------|-----|-----|-------|--------|-------------|---------------------|
| 1,   | 1,         | 1,        | 73, | 67, | 2.4,  | B5,    | no,         | 0.83                |
| 5,   | 6,         | 5,        | 52, | 78, | 1.2,  | B5,    | yes,        | 0.50                |
| 4,   | 5,         | 3,        | 80, | 82, | 1.0,  | B5,    | no,         | 0.38                |
| 7,   | 3,         | 7,        | 87, | 90, | 0.7,  | B5,    | no,         | 0.35                |
| 9,   | 0,         | 4,        | 83, | 45, | 0.8,  | B5,    | no,         | 0.28                |

FIG.16

41

PRODUCT TYPE NAME  
LOGIC234  
LAYER NAME  
METAL1  
MAXIMUM DEFECT NUMBER  
20  
OBJECT  
FAILURE PROBABILITY  
0.30 OR GREATER  
EXCLUDED  
B5  
BLOCK EDGES B1, B2

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FIG.17

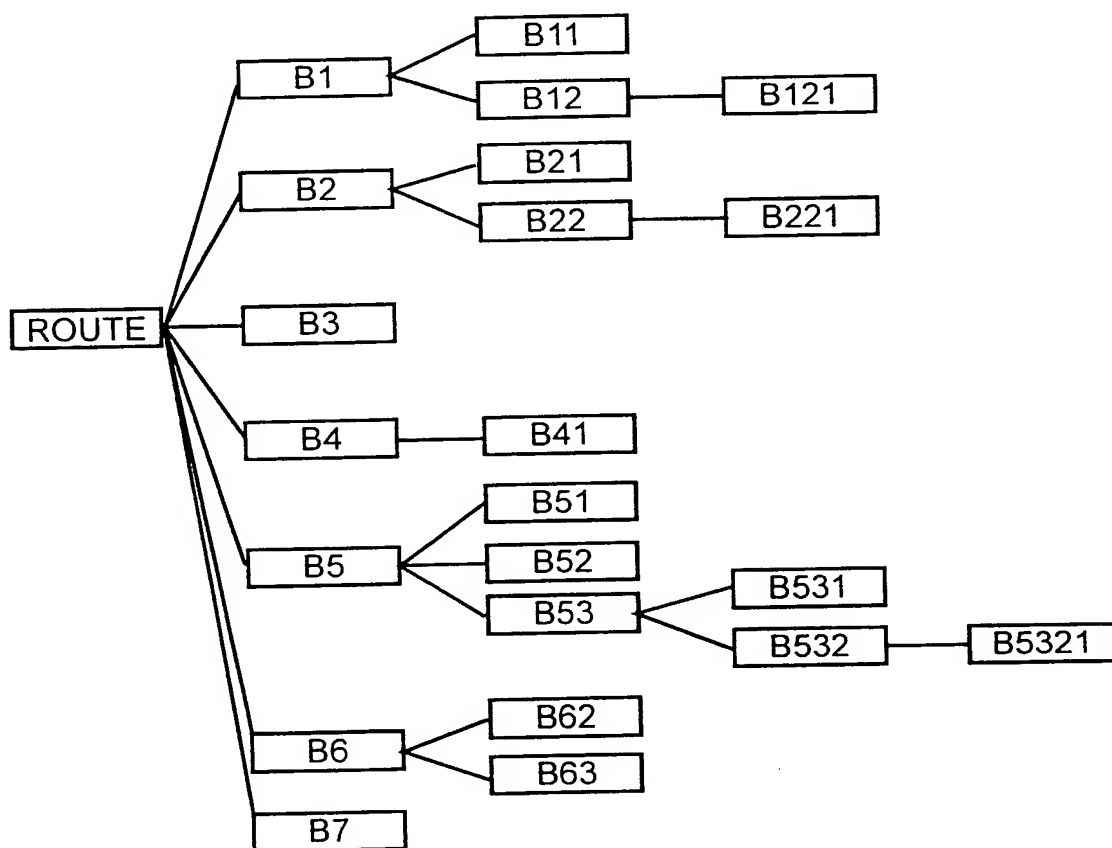


FIG. 17

FIG.18

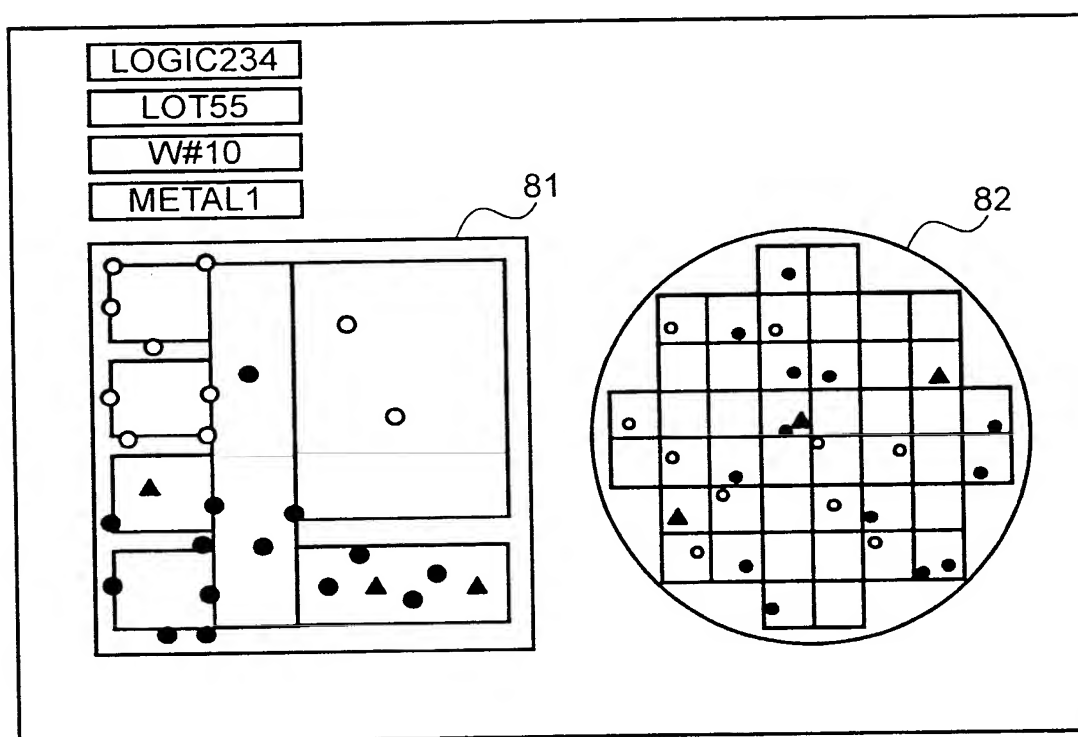


FIG. 19

